

# Training evaluation of the Secondary 3 Training Program of the Project P.A.T.H.S. in Hong Kong

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## Abstract

A total of 235 participants from 48 schools participated in a 3-day training program designed to train teachers and social workers to implement the Secondary 3 Program of the Project P.A.T.H.S. in Hong Kong. At the end of the training program, participants were invited to respond to a structured subjective outcome evaluation questionnaire containing 31 items. The findings revealed that most of the respondents had very positive perceptions about the training program and the instructors. The present evaluation findings are consistent with the subjective outcome evaluation findings in Secondary 1 and Secondary 2 Training Programs, which revealed the training program of the Project P.A.T.H.S. generated positive reactions, enhanced learning, and desired behavioral changes in the program participants.

**Keywords:** positive youth development; Project P.A.T.H.S.; quantitative evaluation; training program.

## Introduction

The Project P.A.T.H.S. (Positive Adolescent Training through Holistic Social Programs) is a holistic positive youth development program designed for junior secondary school students in Hong Kong, which is financially supported by The Hong Kong Jockey Club Charities Trust. In this Project, the Tier 1 Program is developed for all Secondary 1 to 3 students joining the project

(i.e., universal program), whereas the Tier 2 Program is specifically designed for students with greater psychosocial needs. There are two implementation phases in this Project, namely the Experimental Implementation Phase (EIP) and the Full Implementation Phase. For the EIP, around 50 schools participated in the project with the aims at accumulating experience in program implementation and familiarizing frontline workers with the program design and philosophy. Because of the positive outcomes of the initial phase of the project (2006–2009 school years with an earmarked grant of HK\$400 million), the project was extended for another 3 years (2009–2012 school years), with an additional grant of HK\$350 million.

Shek and Sun (1) pointed out that there are five factors influencing the quality of the implementation of the Project P.A.T.H.S., including the program, people, process, policy, and place (5 “P”s). Among these factors, “people” was identified as the major factor influencing the success of the Tier 1 Program of the P.A.T.H.S. Project. As such, it is significant to provide professional, systematic, and progressive training to the potential program implementers so as to familiarize them with the program philosophy and content, as well as to cultivate their enthusiasm and support for the program. In addition, in-service training and/or refresher training is important because it is considered to be one of the key aspects of successful program implementation.

Various research studies have shown that professional training and development can enhance the capacity and skills of the youth workers as well as the program quality (2–5). According to Clarke (6), in-service training is essential for the effective operation of social services departments in the United Kingdom. In Hong Kong, the contribution of in-service training in the Project P.A.T.H.S. not only depends on the quality of training but also on the features of the implementation process to put the newly acquired knowledge, insights, and skills into teaching or social work practice. Given this background, training programs were tailor-made and offered to all participating schools in the EIP. The program implementers (teachers and/or social workers) involved were invited to participate in a 3-day training workshop, which consisted of 20 hours of training before the implementation of the Tier 1 Program (the Secondary 3 Program) of the Project P.A.T.H.S.

The Secondary 3 Training Program of the Project P.A.T.H.S. is a training program at an advanced level, with ‘use of self’ and ‘self-disclosure’ repeatedly emphasized in the training program. In addition, the Secondary 3 training is also specifically designed to encourage the participants to reflect on their understanding of adolescents and to know more about the positive youth development. The overall objectives of the training are: (a) to enhance the participants’ understanding and self-reflection on the adolescent developmental

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characteristics and needs in Hong Kong; (b) to introduce the concept, design, and research of the positive youth development program; (c) to introduce the rationale, design, implementation, and evaluation of the Project P.A.T.H.S.; (d) to introduce the Tier 1 Program (Secondary 3) of the Project P.A.T.H.S. (including the Full Program and the Core Program); (e) to equip the participants with necessary attitudes, knowledge, teaching skills, and strategies for the successful implementation of the Tier 1 Program; and (f) to facilitate the sharing and building of a mutual support network among the participants.

In a systematic review of training programs in adolescent prevention and positive youth development, Shek and Wai (7) emphasized 12 guiding principles in training and evaluation of youth programs, which have been adopted in the training program of the Project P.A.T.H.S. These 12 principles include: 1) adoption of training theories/models, 2) acquisition of knowledge on adolescents and the program, 3) understanding the curriculum structure of the program, 4) cultivation of proper skills of implementation, 5) development of self-reflection skills, 6) encouragement of workers to be role models, 7) enhancement of trainees' motivation, 8) promotion of self-efficacy of trainees, 9) provision of opportunities for demonstration and practice, 10) adequate training time, 11) awareness of the impact of cultural context on the program, and 12) evaluation of the training program.

It is advocated in human services and human resource management that training evaluation is indispensable. According to the cumulative reviews of Salas and Cannon-Bowers on training and development (8), they highlighted that program evaluation results can indicate whether the program objectives are appropriate to achieve the desired outcome and whether the content and methods used in training can achieve the overall program goal. In addition, evaluation findings can reflect the level of "training transfer". By contrast, they give emphasis to the training evaluation which should focus on what has worked or not worked in the training program, in which appraisals of learning at different levels and from different stakeholders should be taken into consideration to examine the program effectiveness and the training transfer. As such, training should not only be seen as a structured program or curriculum but rather as complex and dynamic interactions among program participants and instructors.

For more than 40 years, the classic four-level training evaluation model proposed by Kirkpatrick (9–11) is commonly highlighted in the literature of organizational training evaluation. The four levels of evaluation criteria are reaction (Level I), learning (Level II), behavior (Level III), and results (Level IV). For the reaction criteria, it is concerned about the trainees' perceptions, impressions, feelings, and satisfaction about the training topics, trainers, schedule, and so forth, which is basically a measure of client satisfaction. In addition, when measuring reaction, we can assess if the participants are motivated and interested in learning. The learning criteria (Level II) are measures of learning and are typically indexed by objective and quantifiable learning outcome measures or indicators. The behavior criteria (Level III) are measures of the extent to which participants change their on-the-job behavior as a

result of the training. This also refers to transfer of training, which measures knowledge and skills gained in the training, and are applied on the job. The Level IV criteria (i.e., results) are measures of the final outcome that are generated owing to the contribution of training. Kirkpatrick's model addresses the need of training professionals to understand the importance of training evaluation and how to conduct evaluation in a relative systemic way.

Although Kirkpatrick's model has been criticized (12), this model continues to be a prominent one in training evaluation (13). Russ-Eft and Preskill (14) stated that Kirkpatrick's model offers a solid starting point as the first attempt to formalize the notion of various outcomes that should be evaluated for a training program. The literature revealed that most of the training evaluation reports are simply statements of participants' satisfaction (Levels I and II), which are used to determine the success of a program. Veenman et al. (15) indicated that the lack of research with regard to Levels III and IV can be explained by the challenge and "difficulty to set up methodologically sound studies that may explain causal relationships between in-service activities and pupils' progress" (p. 304).

A survey of the literature shows that subjective outcome evaluation or a client satisfaction questionnaire is widely adopted in assessing program effectiveness in the human services (16). This type of evaluation can be used to understand the program participants' personal experience about the training program, in both a quantitative way (using surveys with a structured rating scale) and a qualitative way (qualitative inquiry with open-ended questions). Although there are arguments for and against the use of quantitative measures of subjective outcome evaluation, the use of a structured rating scale is routinely used as an evaluation mechanism in education and welfare services (17–19).

In the present paper, subjective outcome evaluation findings based on structured rating items are reported to give a picture on the training evaluation in the P.A.T.H.S. Project. Although new training evaluation approaches have been proposed, the first three levels of Kirkpatrick's model (i.e., reaction, learning, and behavior) will be the focus in this study as these criteria are conceptually relevant for our purpose. The impact of the training of the Project P.A.T.H.S. will be discussed with reference to Levels I, II, and III of Kirkpatrick's framework by the participants' self-reports. Although some comments have revealed that the four-level evaluation model is too simple and this is the simplest form of evaluation criteria, it serves an important purpose. It helps to clarify the meaning of evaluation criteria and offer appropriate guidelines.

## Methods

A total of 48 schools participated in the Secondary 3 Program of the Project P.A.T.H.S. in the EIP in the 2007–2008 academic year. Among these schools, 17 schools adopted the 20-h full program which consists of 40 teaching units, and 31 schools adopted the 10-h core program involving 20 teaching units. From these participating schools, 235 participants registered for four training workshops. Each training workshop provided 12 sessions of training, amounting

to 20 hours, held in 3 days within the same week. A Training Manual and a soft copy of the manual were distributed to the program participants at the first session of the training workshops.

At the last session of each training workshop, the participants were invited to write down what they had learned in the training workshop, followed by a structured evaluation questionnaire distributed to each participant. The questionnaire focuses on the perceptions of the participants of the program content, activities format, program instructors, self-performance, and administrative arrangement. All participants responded to all items in the evaluation form in a self-administration format. Provisions were also made for open-ended responses to enable respondents to make comments of appreciation or provide suggestions on matters not covered by the closed-ended questions with predefined answers. In addition, adequate time was provided for the participants to complete the questionnaire. After collecting the data, the training team of the Project P.A.T.H.S. inputted the data into an EXCEL file, which automatically computed the frequencies and percentages associated with the different ratings for an item.

### Instruments

The 31 items of the questionnaire were used to assess the participants' satisfaction with the training program and the instructors as well as their views towards their own performance. There are several parts in the subjective outcome evaluation questionnaire of the training program for the Project P.A.T.H.S., as follows:

- Participants' basic demographic information.
- Participants' perceptions of the training program, including the program objectives, design, activities format, and interaction among the participants (16 items).
- Participants' perceptions of the instructors, including the understanding of the course, teaching skills, and professional attitude (5 items).
- Participants' perceptions of their own performance, including involvement during program, application of their learning, and having confidence in the project implementation (4 items).
- Participants' perceptions of the administrative arrangement, such as program enrolment, hospitality, venue, and facilities (6 items).
- Things that the participants appreciated most (open-ended question).
- Aspects of the program that require improvement (open-ended question).

### Results

The questionnaire consists of 31 items with a 6-point scale (1=strongly disagree to 6=strongly agree). The internal consistency of the whole scale was good ( $\alpha=0.93$  for the total scale). In addition, all subscales on the training program (16 items), instructors (5 items), participants' own performance (4 items), and administrative arrangement (6 items) were also reliable. The  $\alpha$ -values, mean inter-item correlation, and mean item-total correlation coefficients are presented in Table 1.

The mean number of participants per workshop was 49.25. The total number of the evaluation questionnaire completed was 177. Among these respondents, 69.5% of them ( $n=123$ ) were female and 30.5% were male. In addition, 57.6% of the participants ( $n=102$ ) were teachers, whereas 41.2% of the participants ( $n=73$ ) were social workers. For their work

**Table 1** Reliability measures.

Measure	Mean inter-item correlation	Mean item-total correlation	$\alpha$
31 items	0.311	0.537	0.930
16 items	0.356	0.563	0.894
5 items	0.636	0.745	0.894
4 items	0.531	0.645	0.812
6 items	0.524	0.663	0.860

experiences, their self-reported work experience was from a minimum of 1 year to a maximum of 21 years (mean=9.55, SD=5.66). It can be seen from Table 2 that a high proportion of the participants had positive perceptions of the program contents and activities formats, including promotion of the participants' understanding of positive youth development (99%), promotion of participants' positive attitude to adolescent development (100%), strengthening of the participants' understanding of the Project P.A.T.H.S., including its basic philosophy, design, implementation, and evaluation (100%), enhancement of participants' understanding of the Tier 1 Program (100%), and encouragement from instructors to do their best (99%).

As indicated in Table 3, all participants had positive evaluation of program instructors: 100% of the participants indicated that the instructors showed good professional attitude; 100% of the participants perceived that the instructors had good mastery of the curriculum, and that their teaching was clear and easy to understand (100%); there was also positive evaluation of the teaching performance of the instructors (100%). In short, all the respondents perceived the instructors in a positive and encouraging manner.

Regarding the performance of the program participants (Table 4), a very high proportion of the participants had positive evaluation of their own performance in the training program (98%). Almost all of the respondents (99%) indicated that they were willing to apply the specific skills and theories learned from the training program, and 98% of the respondents reflected they had confidence in program implementation after attending the training program. In addition, most of the respondents (94%) indicated that they participated actively during discussion. Finally, as shown in Table 5, the participants had good evaluation of the administrative arrangement.

### Discussion

The subjective outcome evaluation findings based on the responses of the potential program implementers in the Project P.A.T.H.S. are presented in this study. In terms of evaluation, the current feedback from the training participants obviously indicated that the Secondary 3 Training Program had been successfully implemented. At the same time, feedback concerning program outcomes was also extremely positive. The present quantitative findings indicated that the training of the Project P.A.T.H.S. generally generated positive reactions,

**Table 2** Summary of the views of the participants towards the contents and activities format of the training program.

Your views towards the contents and activities format of the training program	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	1		2		3		4		5		6					
	n	%	n	%	n	%	n	%	n	%	n	%				
1. It has strengthened my understanding of the nature of adolescent development.	0	0	0	0	1	1	23	13	122	69	31	18	177	99	5.03	0.52
2. It has helped me to cultivate positive attitude to adolescent development.	0	0	0	0	0	0	7	4	107	60	63	36	177	100	5.32	0.55
3. It has strengthened my understanding of positive youth development, including its concept, design, and research.	0	0	0	0	1	1	18	10	126	71	32	18	177	99	5.07	0.51
4. It has helped me to understand the Project P.A.T.H.S., including its basic philosophy, design, implementation, and evaluation.	0	0	0	0	0	0	19	11	125	71	33	19	177	100	5.08	0.52
5. It has strengthened me to understand the content of the Tier 1 Program.	0	0	0	0	0	0	10	6	127	72	39	22	176	100	5.16	0.46
6. It has helped me to acquire the attitude, knowledge and skills that are conducive to the successful implementation of the Tier 1 Program.	0	0	0	0	0	0	10	6	126	71	41	23	177	100	5.18	0.49
7. It has helped me to establish self-help support network and shared teaching experiences among the program participants.	0	0	3	2	5	3	66	37	85	48	18	10	177	95	4.62	0.70
8. The training methods and activities are appropriate (e.g., lecture, games, group discussion).	0	0	0	0	1	1	13	7	110	62	53	30	177	99	5.21	0.67
9. Training time is appropriate.	1	1	2	1	4	2	29	16	110	62	31	18	177	96	4.91	0.76
10. It has met my expectation.	0	0	0	0	0	0	13	7	113	64	51	29	177	100	5.21	0.56
11. Overall speaking, I am satisfied with the training program.	0	0	0	0	0	0	8	5	103	58	66	37	177	100	5.33	0.54
12. There was much peer interaction among participants.	0	0	0	0	2	1	29	16	111	63	35	20	177	99	5.01	0.64
13. Instructor(s) encouraged participants to do the best.	0	0	0	0	1	1	7	4	100	56	69	39	177	99	5.34	0.54
14. I think participants are satisfied with the training program.	0	0	0	0	2	1	6	3	124	70	45	25	177	99	5.20	0.51
15. It has promoted self-reflection.	0	0	0	0	1	1	10	6	85	48	81	46	177	99	5.39	0.58
16. It has helped me to recognize factors affect teaching.	0	0	1	1	0	0	11	6	120	68	45	25	177	99	5.18	0.50

**Table 3** Summary of the views of participants towards program instructors.

Your views towards program instructor(s)	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	1	2	3	4	5	6	1	2	3	4	5	6				
	n	%	n	%	n	%	n	%	n	%	n	%				
1. The instructor(s) had good mastery of the curriculum.	0	0	0	0	0	0	2	1	68	38	107	60	177	100	5.59	0.52
2. The instructor(s) understood the needs of participants.	0	0	0	0	0	0	3	2	86	49	87	49	176	100	5.48	0.53
3. The instructor(s) showed good professional attitude.	0	0	0	0	0	0	2	1	33	19	141	80	176	100	5.79	0.43
4. The instructor(s)' teaching was clear and easy to understand.	0	0	0	0	0	0	3	2	47	27	127	72	177	100	5.70	0.46
5. Overall speaking, I have positive evaluation of the instructor(s)' teaching performance.	0	0	0	0	0	0	1	1	43	24	133	75	177	100	5.75	0.44

**Table 4** Summary of the views of participants towards themselves.

Your views towards yourself	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	1	2	3	4	5	6	1	2	3	4	5	6				
	n	%	n	%	n	%	n	%	n	%	n	%				
1. I participated actively during discussion.	1	1	1	1	9	5	41	23	106	60	19	11	177	94	4.73	0.84
2. I am willing to apply the specific skills and theories learned from this training program.	0	0	0	0	1	1	15	8	128	72	33	19	177	99	5.09	0.53
3. After attending the training program, I had confidence in program implementation.	0	0	0	0	4	2	31	18	125	71	17	10	177	98	4.88	0.61
4. Overall speaking, I am satisfied with my performance.	0	0	1	1	2	1	29	16	129	73	15	9	176	98	4.88	0.66



**Table 5** Summary of the views of participants towards administrative arrangement.

Your views towards administrative arrangement	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	1		2		3		4		5		6					
	n	%	n	%	n	%	n	%	n	%	n	%				
1. Information obtained before attending the workshop.	0	0	3	2	6	3	44	25	109	62	15	8	177	95	4.72	0.75
2. Workshop assigned.	0	0	1	1	1	1	14	8	130	73	31	18	177	99	5.07	0.53
3. Location of the workshop.	0	0	0	0	3	2	18	10	123	69	33	19	177	98	5.05	0.60
4. Reception provided by Training Team (e.g., traffic arrangement, refreshments, etc.).	0	0	0	0	3	2	12	7	109	62	53	30	177	98	5.20	0.59
5. Facilities of the venue.	0	0	0	0	2	1	9	5	121	68	45	25	177	99	5.18	0.63
6. Overall speaking, I am satisfied with the administration arrangement.	0	0	0	0	1	1	7	4	128	72	41	23	177	99	5.18	0.56

enhanced learning, and desired behavioral changes in program participants. Based on the principles of triangulation and utilization-focused evaluation (20), the present findings are consistent with the findings obtained from the quantitative evaluation and qualitative evaluation (i.e., the two open-ended questions) of the Secondary 1 Program of the EIP (17, 18), which showed that all the stakeholders had favorable perceptions of the program.

With reference to Kirkpatrick's four-level model and its evaluation criteria, several points can be highlighted from the present study. First, in relation to the reaction criteria (Level I), a majority of participants reported that the program met their expectations with good and favorable reactions. For instance, many participants indicated that they participated actively and they were satisfied with the training program, instructors, and the overall administrative arrangements. With regard to the learning criteria (Level II), many participants indicated that they had developed the related knowledge and skills through participation in the training. Furthermore, many participants reported that the training program strengthened their understanding of positive youth development, including its concept, design, and research. Most important of all, nearly all of the participants felt that the training program helped them cultivate positive attitude to adolescent development and understand basic philosophy, design, implementation, and evaluation of the Project P.A.T.H.S., as well as the content of the Tier 1 Program.

Regarding perceived behavior changes at Level III (i.e., the extent of performance change), the findings suggest that there were positive perceived attitude changes – nearly all of the participants claimed that the training program had promoted self-reflection and they expressed that they had confidence in future program implementation. Keys (21) indicated that teachers' resistance might hamper the implementation of a new program. As such, if program implementers feel confident in implementing a new and unfamiliar program, it is noteworthy as their resistance will be diminished, which will have positive influence on program implementation. In addition, a high proportion of participants indicated that they are willing to apply the specific skills and theories learnt from the training program. The positive intention of integrating new knowledge and skills learned into practice reveals the support of perceived training transfer. Of course, it is noteworthy that perceived performance change might not be equivalent to real performance change and it is necessary to collect longitudinal data to see how perceived performance change would be translated to performance change in reality.

There are three strengths of this study. First, this study investigated different aspects of subjective outcome, including views towards the training program, training instructors, perceived effectiveness, and overall satisfaction. In addition, all scales were found to be reliable. Second, because there are only a few systematic evaluation studies on training programs and few published evaluation studies on training programs related to positive youth development programs in Chinese contexts, the present study provides a significant contribution to the literature. Finally, a reliable measure of subjective outcome evaluation was used in this study.

However, there are three limitations of this study. First, only the first three levels of Kirkpatrick's model are discussed with reference to the findings in this paper. Second, because the present findings are based on subjective outcome evaluation quantitative data, further integration with other qualitative findings is desirable to obtain the full picture. Third, there are other (missing) alternative explanations for the present positive outcomes: given the demand characteristic (i.e., acting as a 'nice' participant), the participants tended to give positive evaluation. Nevertheless, because all the participants were professionals and they were suggested to respond anonymously and to reflect their views in a frank way with serious manner before completing the questionnaire, this alternative explanation can be dismissed. Another possible explanation of the positive findings can be regarded as random responses (i.e., the participants did not respond seriously). This explanation could also be dismissed because the entire scale was internally consistent with good reliability. The final alternative explanation is that under the hypothesis of "beauty on the beholder side", the optimistic traits, good program outcome, and positive instructors' performance would be in focus, as both authors were involved actively in conducting the training. However, this alternative explanation of "halo effect" could also be dismissed because all participants could make use of the opportunity to voice their dissatisfaction. In fact, negative ratings and comments were collected and recorded, which indicated that attention was also given to the negative traits simultaneously.

Despite these limitations, the present study provides further quantitative findings on the effectiveness of training programs in the P.A.T.H.S. Project. Furthermore, because there is evidence showing the intimate relationship between subjective outcome and objective outcome evaluation findings (22), it would be interesting to ask how the favorable evaluation of training programs can translate into positive evaluation of the Project P.A.T.H.S. in Hong Kong (23–27).

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